In the Claims

1 (Currently Amended). An optic triplexer comprising:

an emitting laser;

a first photodiode;

a second photodiode, wherein said first photodiode and said second photodiode are monolithically integrated on a substrate;

said emitting laser, first photodiode, and second photodiode are axially aligned with an emission axis of said emitting laser; and

a thin film filter located between said emitting laser and one of said first and second photodiodes.

2 (Original). The optic triplexer of Claim 1, wherein said emitting laser is monolithically integrated on the substrate.

3 (Currently Amended). The optic triplexer of Claim 1, wherein said first photodiode is axially aligned between said emitting laser and said second photodiode [said emitting laser is placed on one of said first and second photodiodes].

4 (Canceled).

5 (Original). The optic triplexer of Claim 1, further comprising a thin film filter located between said first photodiode and said second photodiode.

6 (Currently Amended). The optic triplexer of Claim 1, wherein said emitting laser, said first photodiode and said second photodiode are packaged within a transistor outline (TO) can and arranged such that optical signals received by said TO can first impinge on said emitting laser before impinging on one of said first photodiode and said second photodiode.

7 (Currently Amended). An optic triplexer comprising:

an emitting laser for transmitting a 1310 +/-10nm optical signal;

a first photodiode for receiving a 1490 +/-5nm optical signal;

a second photodiode for receiving a 1550 +/-5nm optical signal, wherein said first photodiode and said second photodiode are monolithically integrated on a substrate;

said emitting laser, first photodiode, and second photodiode are axially aligned with an emission axis of said emitting laser; and

a 1310 +/-10nm reflective thin film filter located between said emitting laser and said first photodiode.

8 (Original). The optic triplexer of Claim 7, wherein said emitting laser is monolithically integrated on the substrate.

9 (Currently Amended). The optic triplexer of Claim 7, wherein said first photodiode is axially aligned between said emitting laser and said second photodiode [said emitting laser is placed on said first photodiode].

10 (Original). The optic triplexer of Claim 7, wherein said first photodiode has a cutoff wavelength dependent on relative concentrations of dopants in an absorption region of the substrate.

11 (Original). The optic triplexer of Claim 7, wherein said second photodiode has a cutoff wavelength dependent on relative concentrations of dopants in an absorption region of the substrate.

12 (Canceled).

13 (Original). The optic triplexer of Claim 7, further comprising a 1490 +/-5nm reflective thin film filter located between said first photodiode and said second photodiode.

14 (Original). The optic triplexer of Claim 7, wherein said emitting laser is a vertical cavity surface emitting laser (VCSEL).

15 (Original). The optic triplexer of Claim 7, wherein said substrate is an InGaAs substrate.

16 (Currently Amended). A method for making an optic triplexer, said method comprising the steps of:

providing a substrate;

monolithically forming a photodiode on said substrate;

monolithically forming another photodiode on top of said photodiode;

placing/monolithically forming an emitting laser on top of said another photodiode; and

forming a thin film filter on top of said photodiode before forming said another photodiode; and

forming a thin film filter on top of said another photodiode before placing/monolithically forming said emitting laser.

17 (Canceled).

18 (Canceled).

19 (Original). The method of Claim 16, wherein:

said emitting laser is capable of transmitting a 1310 +/- 10nm optical signal;

said photodiode is capable of receiving a 1550 +/- 5nm optical signal; and

said another photodiode is capable of receiving a 1490 +/- 5nm optical signal.

20 (Original). The method of Claim 16, wherein said emitting laser is a vertical cavity surface emitting laser (VCSEL).

21 (Original). The method of Claim 16, wherein said substrate is an InGaAs substrate.

22 (Currently Amended). A passive optical network comprising:

an optical line terminal (OLT); and

an optical network terminal (ONT) that incorporates an optic triplexer which includes:

an emitting laser capable of transmitting a 1310 +/-10nm optical signal;

a first photodiode capable of receiving a 1490 +/-5nm optical signal;

a second photodiode capable of receiving a 1550 +/-5nm optical signal, wherein said first photodiode and said second photodiode are monolithically integrated on a substrate; and

said emitting laser, first photodiode, and second photodiode are axially aligned with an emission axis of said emitting laser [a thin film filter located between said emitting laser and one of said first and second photodiodes].

23 (Original). The passive optical network of Claim 22, wherein said emitting laser is monolithically integrated onto the substrate.

24 (Currently Amended). The passive optical network of Claim 22, wherein said first photodiode is axially aligned between said emitting laser and said second photodiode [said emitting laser is placed on the first photodiode].

25 (Currently Amended). An optical network terminal (ONT) that incorporates an optic triplexer which includes:

an emitting laser capable of transmitting a 1310 +/-10nm optical signal;

a first photodiode capable of receiving a 1490 +/-5nm optical signal;

a second photodiode capable of receiving a 1550 +/-5nm optical signal, wherein said first photodiode and said second photodiode are monolithically integrated on a substrate; and

said emitting laser, first photodiode, and second photodiode are axially aligned with an emission axis of said emitting laser [a thin film filter located between said emitting laser and one of said first and second photodiodes].

26 (Original). The optical network terminal of Claim 25, wherein said emitting laser is monolithically integrated onto the substrate.

27 (Currently Amended). The optical network terminal of Claim 25, wherein said first photodiode is axially aligned between said emitting laser and said second photodiode [said emitting laser is placed on the first photodiode].

28 - 33 (Canceled).

34 (New). An optic device for transceiving optical signals along an axis, comprising:

a laser selectively emitting a first optical signal along an axis of emission;

a first photodiode detecting a second optical signal;

a second photodiode detecting a third optical signal, wherein said laser, said first photodiode, and said second photodiode are axially aligned with said emission axis; and

said first photodiode being located between said laser and said second photodiode.

35 (New). The optical device of Claim 34 further comprising;

a first filter located between said laser and said first photodiode; and

a second filter located between said first photodiode and said second photodiode.

36 (New). The optical device of Claim 35, wherein said first filter is adapted for filtering said first optical signal and said second filter is adapted for filtering said second optical signal.

37 (New). The optical device of Claim 35, wherein said laser, said first photodiode, said second photodiode, said first filter, and said second filter are integrated within a transistor outline (TO) can and arranged such that optical signals received by said TO can first impinge on said emitting laser before impinging on one of said first photodiode and said second photodiode.

38 (New). The optical device of Claim 34, wherein said laser, said first photodiode and said second photodiode are integrated within a transistor outline (TO) can and arranged such that optical signals received by said TO can first impinge on said emitting laser before impinging on one of said first photodiode and said second photodiode.